Service: Operating Environment Provisioning - IBM

Service Line: Operating Environment Provisioning

Status: In Production

General Description:
The z/OS environment performs data processing activities for many state agencies. It is partitioned into four logical operating systems or LPARs: A, B, TA, and TB:

- The A system is the primary online production environment running 31 CICS production regions and two regions for CICSPlex, all production batch work, and TSO.
- The B system is a test and development environment which runs 90 test CICS regions, two regions for CICSPlex, and TSO.
- The other two, TA and TB, are test environments for new system software and are active only when the technical staff is testing new or changed system software.

Service Level Targets: 98% production availability

Availability:
- **Production**:   24 hours a day, 365 days a year
- **Test**:   11 hours a day (7 a.m. - 6 p.m., five days a week (Monday - Friday)
- **Development**:   11 hours a day (7 a.m. – 6 p.m., five days a week (Monday - Friday)

Limitations: N/A

Prerequisites:
Connectivity to state network and the Data Center

Pricing / Charges:

For fiscal year 2006 and 2007, the IBM platform bills the rates listed for the following services:

Description	FY06 Price	Units
I/O Usage A - SMF	0.070000	Per 1000 EXCP'S
I/O Usage A - DB2	0.070000	Per 1000 EXCP'S
I/O Usage B	0.040000	Per 100 EXCP'S
CPU time	0.120000	Per second
Disk Library	0.025000	Per 10,000K block days
HSM M-1	0.000300	Per 200K block days
HSM M-2	0.000100	Per 200K block days
Tape Library	0.1252	Per tape day

Rates for budgeting for fiscal year 2008 are the same as the rates above. For application-specific price quotes, contact your GTA Account Manager by calling GTA Solutions Marketing (404) 651-6964 or e-mail gtasolutionsmrktg@gta.ga.gov to be directed to your Agency Account Manager.

Service Components or Product Features Included in Base Price:
The IBM Mainframe (IBMF) design provides a number of technical support services. The following are available to applications joining IBMF:

- **Operating system hardware and software -** Operating environment hardware is replaced completely (refreshed) based on a five-year life cycle
- **Z/OS Infrastructure Support** - SUS and patch management; SNA Network including a Unisys gateway; VTAM; TSO/ISPF; Connect:Direct; VPS; TCP/IP
- **Middleware Support –** CICS Transaction Server; TMON is used for CICS for real time monitoring and CICSPlex/SM (CPSM) for system level monitoring; VTAM
- **RDBMS Support** - Database services via DB2; TMON is used for real time monitoring
- **Capacity and Performance Management** - Tape backup with Virtual Tape System (VTS); DASD disk storage with RAID 1; data archiving
- **Production Job Monitoring** - Secure file transfer; job scheduling with BMC's Control-M, Control-O
- **Infrastructure Security Compliance** - Authentication via RACF; Disaster recovery
- **Operations Command Center Monitoring** - Fully-enforced SDLC environment; Continuous performance monitoring and surveillance of the operating environment for service events

Options Available for an Additional Charge:
- View Direct
- Remote terminal access via Attachmate

Service Components or Product Features Not Included:
- Advanced systems monitoring
- Capacity on demand
- High bandwidth communication

What GTA Provides:
IBMF engineers provide operating environment support only. IBMF support helps the customer with troubleshooting and maintenance from the platform perspective.

The operating environment consists of the hardware, operating systems, software, databases, middleware and network connections under the direct operational responsibility of the Data Center.

Other GTA responsibilities:

1. Assigning a service manager for each service offering. The service manager serves as a contact for any questions, issues or escalations the customer may have about the service offering, and is responsible for notifying customer management during major disruptions. Multiple contacts may be assigned for various aspects of the service offering.
2. Maintaining and tracking all operating environment upgrades, patches and licenses to achieve service level targets consistently.
3. Performance tuning, monitoring, and system-level troubleshooting of the operating environment.
4. Performing incident, change, problem and request management reporting and tracking.
5. Creating, modifying and deleting user IDs and passwords.
6. Coordinating service requests with other GTA support teams.
7. System and security auditing - Ensuring that the operating environments of the customer applications comply with current GTA enterprise security policies as defined in the initial security assessment.
8. Monitoring of systems, processes, scheduled jobs, and storage capacity including file system growth.
9. Vaulting of application data as prescribed by the customer in their backup procedures.

What the Customer Provides:

1. Application support, including developing, maintaining and operating its application, jobs, and the application data and logs.
2. Obtaining the necessary business case approvals.
3. Providing customer escalation and notification paths and contact information for communicating about incidents associated with the application.
4. Designating an owner responsible for participating in the Data Center's Change Advisory Board as an ad-hoc non-voting member and adhering to the production acceptance process to submit production environment changes.
5. Using appropriate tools and processes (ServiceCenter®) to submit service requests.
6. Providing application capacity planning requirements (trends, new products, etc.) every quarter.
7. Performing any application vulnerability assessments and ensuring that customer employees and contractors comply with all security standards as outlined in the current GTA Enterprise Information Security Policy available on the GTA web site http://www.gta.georgia.gov).
8. Ensuring that customer workstations meet the minimum recommended hardware and software prerequisites to install and run the customer applications.
9. Providing backup and recovery requirements as well as the retention schedules for all non-database application files, and ensuring that any database backup routines or database exports are executed and completed prior to the scheduled nightly system backup.
10. Resolving compatibility issues introduced by using unsupported hardware and software.
11. Data archiving (not vaulting) of application data.

Service Support: Contact the GTA Command Center at (404) 656-7378 or send an e-mail to **CommandCenter@gta.ga.gov**.

Service Issue Escalation: Contact the GTA Command Center at (404) 656-7378 or send an e-mail to **CommandCenter@gta.ga.gov**.

Benefits / Advantages: N/A

How to Start this Service:
Contact the GTA Office of Solutions Marketing at gtasolutionsmrktg@gta.ga.gov or by phone at (404) 651-6964 to be directed to your GTA Account Manager.

Related Services and Products:

- OEP - UNISYS
- Data Storage Services
- Interactive Voice Response
- Laser Print Services
- Tape Storage Services

Other Information:

The IBM 2064-111 has 11 instruction processors; the 2064-1C4 has four. They have capacities of 2080 and 890 million instructions per second (MIPS). The two systems share the following elements:

- 2,112 EMC DASD volumes with total capacity of 9.2 billion kilobytes
- 44 tape transports (3490 technology drives)
- 1 IBM 3494 VTS
    - 64 virtual 3490's
    - Five 3590 technology drives
    - Eight 3592 technology drives
- 6 Printers
    - One impact-type printer
    - Five Xerox high-speed laser printers
- Three front-end processors for communications (described in more detail under the Wide Area Network)

An IBM 9672-R06 is used as the external coupling facility for the two systems.

Terms and Definitions: N/A